

**TRANSMITTAL LETTER  
(General - Patent Pending)**

Docket No.  
227/04819

In Re Application Of: **Benny PESACH, et al.**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/551,543	I.A.March 29, 2004	Unknown	44909	Unknown	4415

Title: **PHOTOACOUSTIC ASSAY METHOD AND APPARATUS**

**COMMISSIONER FOR PATENTS:**

Transmitted herewith is:

**Response to Notification of Defective Response dated November 03, 2006, including:**

1. Copy of Notification of Defective Response
2. Copy of properly signed Declaration
3. Printout from Private PAIR
4. Copy of 1st page of PCT publication

in the above identified application.

- ☒ No additional fee is required.
- ☐ A check in the amount of \_\_\_\_\_ is attached.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. **03-3419** as described below.
- ☐ Charge the amount of \_\_\_\_\_
- ☒ Credit any overpayment.
- ☒ Charge any additional fee required.
- ☐ Payment by credit card. Form PTO-2038 is attached.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**



*Signature*

Dated: **December 04, 2006**

**Maier FENSTER, Reg. No.41,016**

**William H. Dippert, Esq.  
Wolf, Block, Schorr & Solis-Cohen LLP  
250 Park Avenue  
New York, NY 10177**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on \_\_\_\_\_

(Date)

*Signature of Person Mailing Correspondence*

*Typed or Printed Name of Person Mailing Correspondence*

cc:

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**(General - Patent Pending)**

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(Date)

*Signature of Person Mailing Correspondence*

*Typed or Printed Name of Person Mailing Correspondence*

CC:

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Benny PESACH, et al.  
Serial Number: 10/551,543  
I.A. Filing Date: March 29, 2004  
For: **PHOTOACOUSTIC ASSAY METHOD AND APPARATUS**

PCT Legal Office  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE TO NOTIFICATION OF DEFECTIVE RESPONSE**

This is a response to the Notification of Defective Response mailed on November 03, 2006.

Enclosed herewith for filing are the following:

- A copy of the Notification of Defective Response
- A copy of a properly signed declaration in compliance with 37 CFR 1.497(a) and (b) previously filed in the U.S. Patent Office on August 8, 2006, together with a response to a notification of missing requirements.

**REMARKS**

Applicants respectfully point out that the notification of defective response was sent in error. A declaration by all the inventors, executed in compliance with 37 CFR 1.497 (a) and (b), as well as 37 CFR 1.68 identifying the application by serial number and international filing date was previously filed on August 8, 2006, as part of a response to a Notification of Missing Requirements (attached is a copy of the executed declaration).

Also attached is a printout from Private PAIR, of the Image File Wrapper, which contains a copy of the Declaration, filed on August 8, 2006 in response to the notice of missing requirements.

Applicants agent, were informed in a telephone conversation with Ms. Francine Young, who issued the notice, that the declaration is defective due to a discrepancy between the typed name of the second inventor "Gabriel BITTON" and his actual signature which reads (in his hand) "gabby bitton". According to Ms. Young the inventor should have signed his name either to match exactly the typed name, or as an altogether illegible signature (such as a squiggle).

Following Ms. Young's recommendation, applicants' agent then called the PCT Legal Office and were notified that there is no requirement for the signature to appear in any specific format, and that the only requirement is that the typed name on the declaration is identical to the inventors name as it appears in the PCT application. In this case, the typed name on the declaration matches the PCT application (see attached first page of the PCT publication).

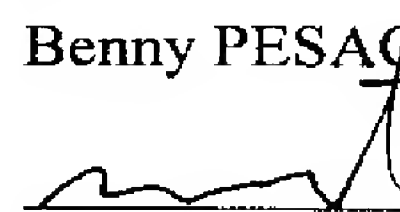
In fact, in accordance with MPEP 605.04 A, there is no requirement that a signature be made in any particular manner.

Applicants respectfully submit that all the requirements under 35 U.S.C. 371 were duly fulfilled on August 8, 2006 and request issuance of a notice of acceptance reflecting this.

Applicants believe that no fee is due, however, if the office deems otherwise, it is authorized to charge Deposit Account No. 03-3419.

Respectfully submitted,

Benny PESACH, et al.



Maier FENSTER, Reg. No. 41,016

December 04, 2006

William H. Dippert, Esq.  
Wolf, Block, Schorr & Solis-Cohen LLP  
250 Park Avenue  
New York, NY 10177

SIR:

Please be advised that a copy of this submission was sent to Mr. Harry Kim in the Legal Department.

Thank you.



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/551,543 ✓	Benny PESACH	227/04819

44909

WOLF, BLOCK, SCHORR & SOLIS-COHEN LLP  
250 PARK AVENUE  
NEW YORK, NY 10177

4819

**RECEIVED**

Docketed By IR

14 NOV 2006

To: NB ☐ ☐ ☐

FENNER & CO.

*due 12/3/06 SM*

INTERNATIONAL APPLICATION NO

PCT/IL04/00289

I.A. FILING DATE

03/29/2004

PRIORITY DATE

04/01/2003

CONFIRMATION NO. 4415

371 FORMALITIES LETTER



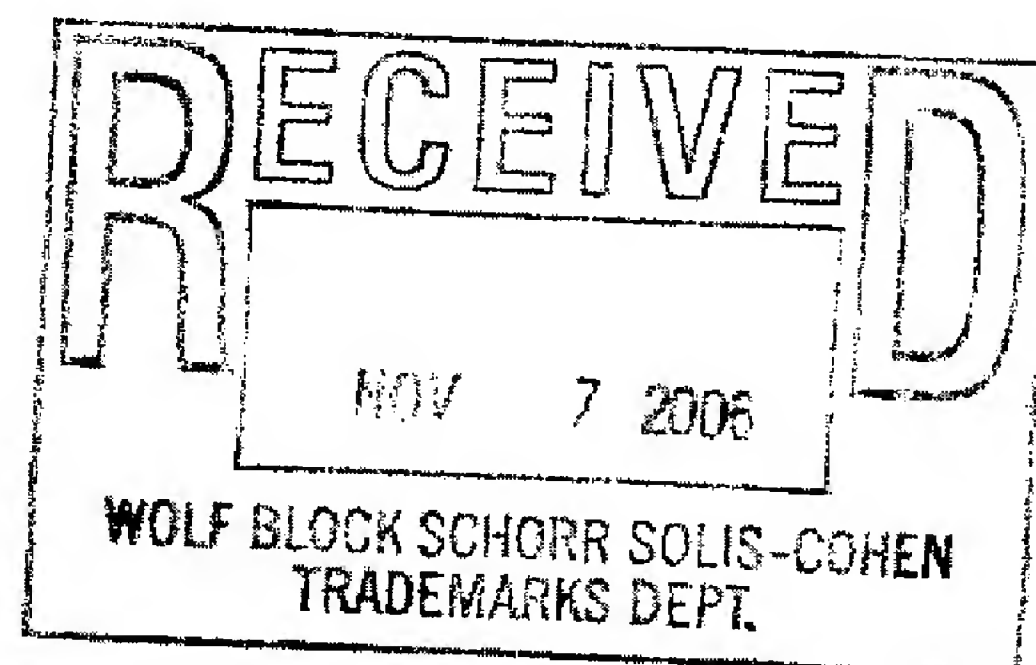
\*OC000000021096729\*

Date Mailed: 11/03/2006

**NOTIFICATION OF DEFECTIVE RESPONSE**

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495)

- Indication of Small Entity Status
- Priority Document
- Copy of the International Application filed on 09/29/2005
- Copy of the International Search Report filed on 09/29/2005
- Copy of IPE Report filed on 09/29/2005
- Preliminary Amendments filed on 09/29/2005
- Oath or Declaration filed on 08/08/2006
- Request for Immediate Examination filed on 09/29/2005
- U.S. Basic National Fees filed on 09/29/2005
- Priority Documents filed on 09/29/2005
- Power of Attorney filed on 10/11/2006



Applicant's response filed 10/11/2006 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 05/09/2006 have not been completed.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date. The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) in that it:
  - is not executed in accordance with either 37 CFR 1.66 or 37 CFR 1.68.

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

*Filed 10/23/06*

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.  
<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at <http://www.uspto.gov/ebc>.

**If you are not using EFS-Web to submit your reply, you must include a copy of this notice.**

FRANCINE YOUNG

Telephone: (703) 308-9140 EXT 215

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/551,543	PCT/IL04/00289	227/04819



Doc Code:

PTO/SB/01A (09-04)  
Approved for use through 06/30/2006 OMB 0681-0032  
U.S. Patent and Trademark Office U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN  
APPLICATION DATA SHEET (37 CFR 1.76)**

Title of Invention: PHOTOACOUSTIC ASSAY METHOD AND APPARATUS

As the below named inventor(s), I/we declare that:

This declaration is directed to:

- ☐ The attached application, or  
☒ Application No. 10/551,543, filed on I.A. March 29, 2004  
☒ as amended on September 29, 2005 (if applicable).

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/ we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application

All statements made herein of my/our own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

**FULL NAME OF INVENTOR(S)**

Inventor one: Benny PESACH

Signature: *Benny Pesach*

Citizen of: Israel

Inventor two: Gabriel BITTON

Signature: *gabby bitton*

Citizen of: Israel

Inventor three: Michal BALBERG

Signature: *Michal Balberg*

Citizen of: Israel

Inventor four:

Signature:

Citizen of:

☐ Additional inventors or a legal representative are being named additional form(s) attached hereto.

This collection of information is required by 35 U.S.C. 116 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

This application is officially maintained in electronic form. To View: Click the desired Document Description. To Download and Print: Check the desired document(s) and click Start Download.

### Available Documents

Mail Room Date	Document Description	Document Category	Page Count
11-03-2006	<b>Pre-Exam Formalities Notice</b>	PROSECUTION	2
11-02-2006	Miscellaneous Internal Document	PROSECUTION	1
10-11-2006	Power of Attorney	PROSECUTION	5
10-11-2006	Status Letter Mailed to Applicant	PROSECUTION	2
08-08-2006	<del>Miscellaneous Incoming Letter</del>	PROSECUTION	1
08-08-2006	Applicant Response to Pre-Exam Formalities Notice	PROSECUTION	2
08-08-2006	Oath or Declaration filed	PROSECUTION	1
08-08-2006	Fee Worksheet (PTO-875)	PROSECUTION	2
08-08-2006	Status Letter Mailed to Applicant	PROSECUTION	2
08-08-2006	Miscellaneous Incoming Letter	PROSECUTION	2
05-09-2006	Notice of DO/EO Missing Requirements Mailed	PROSECUTION	2
09-29-2005	Miscellaneous Internal Document	PROSECUTION	1
09-29-2005	Fee Worksheet (PTO-875)	PROSECUTION	1
09-29-2005	Claims Worksheet (PTO-2022)	PROSECUTION	1
09-29-2005	Transmittal of New Application	PROSECUTION	5
09-29-2005	Specification	PROSECUTION	19
09-29-2005	Claims	PROSECUTION	5
09-29-2005	Abstract	PROSECUTION	2
09-29-2005	Drawings	PROSECUTION	2
09-29-2005	Oath or Declaration filed	PROSECUTION	1
09-29-2005	Miscellaneous Internal Document	PROSECUTION	1
09-29-2005	Fee Worksheet (PTO-875)	PROSECUTION	1
09-29-2005	Preliminary Amendment	PROSECUTION	1
09-29-2005	Specification	PROSECUTION	1
09-29-2005	Claims	PROSECUTION	6
09-29-2005	Applicant Arguments/Remarks Made in an Amendment	PROSECUTION	1
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09-29-2005	Documents submitted with 371 Applications	PROSECUTION	5
09-29-2005	Documents submitted with 371 Applications	PROSECUTION	6

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(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
14 October 2004 (14.10.2004)

PCT

(10) International Publication Number  
**WO 2004/086965 A1**

(51) International Patent Classification<sup>7</sup>: **A61B 5/00,**  
G01N 21/17

97279 Jerusalem (IL). **BALBERG, Michal** [IL/IL]; 19 Nof  
Harim Street, 96190 Jerusalem (IL).

(21) International Application Number:  
PCT/IL2004/000289

(74) Agents: **FENSTER, Paul** et al.; Fenster & Company, In-  
tellectual property, 2002 Ltd., P. O. Box 10256, 49002  
Petach Tikva (IL).

(22) International Filing Date: 29 March 2004 (29.03.2004)

(81) Designated States (*unless otherwise indicated, for every  
kind of national protection available*): AE, AG, AL, AM,  
AT, AU, A7, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
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Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-  
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,  
GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,  
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG).

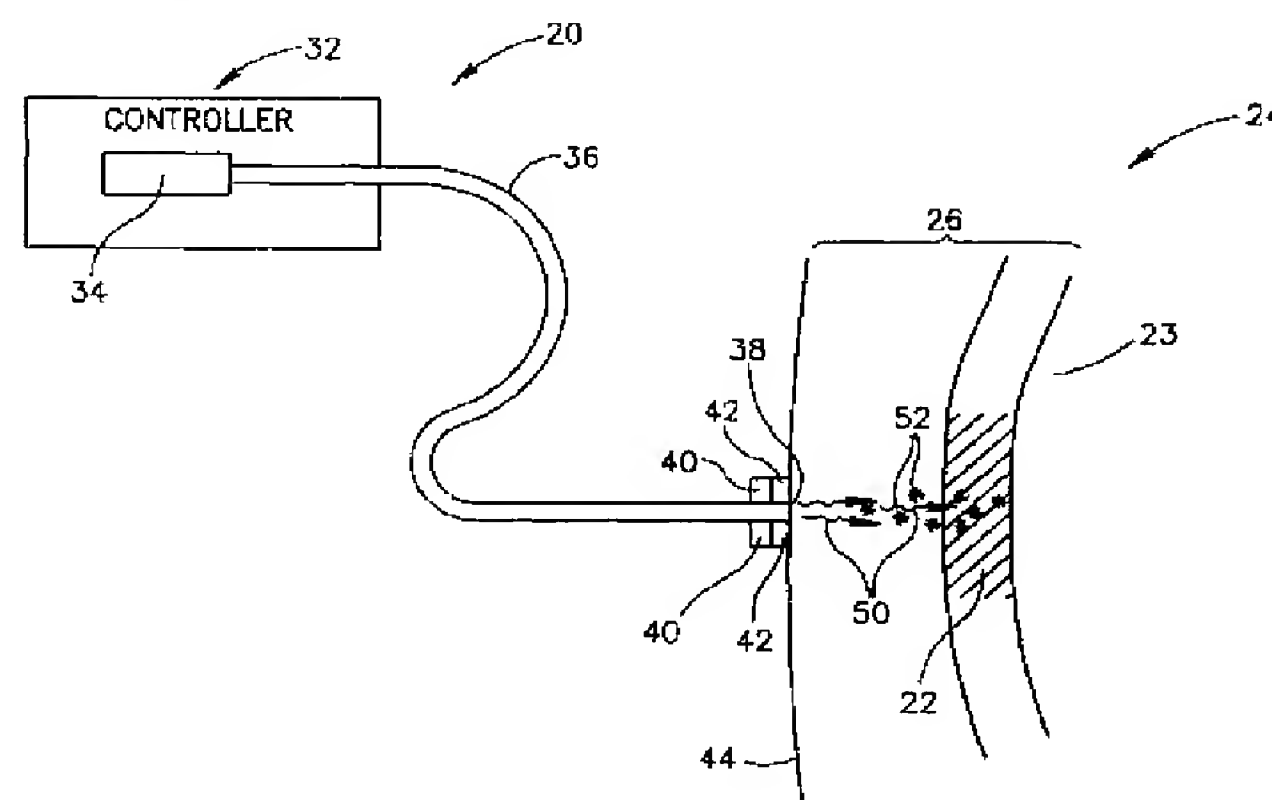
(71) Applicant (*for all designated States except US*): **GLU-  
CON INC.** [US/US]; C/O HOGAN & HARTSON, 555  
Thirteenth Street NW, Columbia Square, Washington, DC  
20004-1109 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **PESACH, Benny**  
[IL/IL]; 18 Shir Hashirim Street, 48702 Rosh-Ha'ayin (IL).  
**BITTON, Gabriel** [IL/IL]; 621/5 Hadaf Hayomi Street,

[Continued on next page]

(54) Title: PHOTOACOUSTIC ASSAY METHOD AND APPARATUS



(57) Abstract: Apparatus(20, 100) for assaying a target analyte in a localized tissue region (22) that may include the target and other analytes comprising: a light source (34, 104) that illuminates the region with light at each of a plurality of wavelengths at which light is absorbed and/or scattered by tissue in the region wherein light at a least one of the wavelengths is absorbed or scattered by the target analyte; a signal generator (40) that generates signals responsive to intensity of the light from the light source (34, 104) at different locations in the localized region (22); and a controller (32, 102) that: receives the generated signals; processes the signals to determine an extinction coefficient for light in the localized region at each wavelength; and determines the concentration of the target analyte responsive to a solution of a set of simultaneous equations having as unknown variables concentrations of a plurality of analytes in the region (22), one of which is the target analyte, wherein each equation in the set expresses a relationship between the extinction coefficient, the absorption coefficient and/or the reduced scattering coefficient for light at a different one of the plurality of wavelengths and at least one of the equations expresses a relationship between the extinction coefficient and the reduced scattering coefficient.

WO 2004/086965 A1